

What is claimed is:

1. A method of controlling a vehicle interior heating and air conditioning system equipped with actuators, comprising the acts of:  
  
detecting interior conditions with an interior sensing system;  
  
detecting automatically seat occupancy with an object recognition system on the basis of the data received from the interior sensing system; and  
  
adjusting automatically the heating and air conditioning system actuators as a function of seat occupancy to maintain desired interior conditions at at least one of a plurality of seats within the vehicle interior.
2. The method of Claim 1, wherein in the adjusting step, the actuators of the heating and air conditioning system are operated so that one of a fan intensity and an air distribution in the direction of one of the plurality of seats is adjusted if said seat is unoccupied by a passenger.
3. The method of Claim 1, wherein in the adjusting step, the actuators of the heating and air conditioning system are operated so that a temperature in the area of an unoccupied one of the plurality of seats is adjusted to approach temperature settings for occupied portions of the vehicle.
4. The method of Claim 2, wherein in the adjusting step, the actuators of the heating and air conditioning system are operated so that a temperature in the area of an unoccupied one of the plurality of seats is adjusted to approach temperature settings for occupied portions of the vehicle.

5. The method of Claim 1, wherein in the adjusting step, the actuators of the heating and air conditioning system are operated in the case of cooling in an area of a seat so that a temperature is increased in the area of an unoccupied one of the plurality of seats to reduce heating and air conditioning system energy usage.

6. The method of Claim 2, wherein in the adjusting step, the actuators of the heating and air conditioning system are operated in the case of cooling in an area of a seat so that a temperature is increased in the area of an unoccupied one of the plurality of seats to reduce heating and air conditioning system energy usage.

7. The method of Claim 1, wherein  
in the step of detecting seat occupancy, a head position is calculated by the object recognition system for at least one occupant, and  
in the adjusting step, an optimized setting of the heating and air conditioning system for each detected occupant is automatically performed by actuators as a function of seat occupancy and head position.

8. The method of Claim 2, wherein  
in the step of detecting seat occupancy, a head position is calculated by the object recognition system for at least one occupant, and  
in the adjusting step, an optimized setting of the heating and air

conditioning system for each detected occupant is automatically performed by actuators as a function of seat occupancy and head position.

9. The method of Claim 3, wherein

in the step of detecting seat occupancy, a head position is calculated by the object recognition system for at least one occupant, and

in the adjusting step, an optimized setting of the heating and air conditioning system for each detected occupant is automatically performed by actuators as a function of seat occupancy and head position.

10. The method of Claim 4, wherein

in the step of detecting seat occupancy, a head position is calculated by the object recognition system for at least one occupant, and

in the adjusting step, an optimized setting of the heating and air conditioning system for each detected occupant is automatically performed by actuators as a function of seat occupancy and head position.

11. The method of Claim 5, wherein

in the step of detecting seat occupancy, a head position is calculated by the object recognition system for at least one occupant, and

in the adjusting step, an optimized setting of the heating and air conditioning system for each detected occupant is automatically performed by actuators as a function of seat occupancy and head position.

12. The method of Claim 6, wherein

in the step of detecting seat occupancy, a head position is calculated by the object recognition system for at least one occupant, and

in the adjusting step, an optimized setting of the heating and air conditioning system for each detected occupant is automatically performed by actuators as a function of seat occupancy and head position.